STATE OF CALIFORNIA—ENVIRONMENTAL PROTECTION AGENCY PETE WILSON, *Governor*

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January 31, 1995

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WELL INVESTIGATION PROGRAM - NO FURTHER ACTION, STOODY COMPANY, 16425 EAST GALE AVE., CITY OF INDUSTRY, CA (FILE NO. 105.0263)

We are in receipt of five "Quarterly Groundwater Monitoring Reports," dated May 3, 1993 (two reports), December 28, 1993, February 10, 1994, and May 23, 1994, and a "Closure and Soil Remediation Report," dated May 23, 1994, prepared by your consultant, Clayton Environmental Consultants. These submissions are in general compliance with an approved work plan dated October 19, 1988, an approved remedial action plan dated September 14, 1992, with two addenda dated November 17, 1992, requirements specified in our letter dated December 2, 1992, and discussions during a meeting among your consultants, yourself, and Board staff on April 26, 1994.

Quarterly Groundwater Monitoring Reports
These five reports present quarterly ground water sampling results for the following monitoring events: the third and fourth quarters of 1992, the third and fourth quarters of 1993, and the first quarter of 1994. The 1994 quarterly monitoring report also includes a historical summary of all the ground water sampling results. Upon review of the reports, we have the following comments:

1. Detected VOC concentrations during the latest ground water monitoring events are similar to previous sampling results, ranging from 9.3-280 µg/l PCE, 2.5-95 µg/l TCE, 0.7-44 µg/l 1,1-DCE, <0.5-4.3 µg/l 1,1,1-TCA, <0.5-0.9 µg/l carbon tetrachloride, and <0.5-0.66 µg/l 1,2-DCA. Measurements of ground water levels, ranging from approximately 23' to 29' bgs, demonstrate a flow direction toward the northwest.

2. The following QA/QC deficiencies were noted in the subject reports:

   - There are no initial and daily calibration data for all the monitoring reports.

   - There are no laboratory quality control check data for monitoring events of the third quarter of 1992, the third and fourth quarters of 1993, and the first quarter of 1994.

- There are no matrix spike/matrix spike duplicate data for the monitoring event of the third quarter of 1992.

- There are no trip and/or equipment blanks analyzed for all the monitoring events except the third quarter of 1992.

- Turbidity is very high (58-610) for samples collected from MW-1, MW-2, MW-3 and MW-4 during the monitoring event of the third quarter of 1992.

The above deficiencies compromise the ground water data. Although correction of these deficiencies may not have changed the qualitative measurements, it would increase the degree of confidence in the accuracy of the analyses. The omitted QA/QC data should be resubmitted.

Closure and Soil Remediation Report

This report presents the field procedures, analytical results, and recommendations based on the data collected and observations made during soil remediation. Field activities included removal of monitoring well MW-5, excavation and backfilling contaminated soil in the clarifier area, collection of soil samples, and disposal of contaminated soil. Upon review of this report, we have the following comments:

1. The subject facility was used for the manufacture of welding rods and wire by Stoody Company from 1976 to 1991, and is currently operated as a warehouse for dry goods. Site assessment and soil remediation from 1988 to 1993 focused on the drum storage-sump area in the northeast corner of the property and the transformer-clarifier area near the north wall of the building. These two areas and the general storage area in the north and northwest portion of the subject site were identified as the areas of concern by Board staff during a site inspection in 1988. Previous assessment work includes multi-phased soil matrix sampling (28 boreholes), collection and analyses of sump and clarifier samples, installation and sampling of five ground water monitoring wells (15 sampling events from February 1989 to March 1994).

2. The investigation and remedial results for the former drum storage/sump area are summarized as follows:

   - Soil matrix data from 6 shallow boreholes (maximum depth 10' bgs) and 2 deep (30' bgs) confirm vadous zone contamination from ground surface to the water table beneath the former sump and drum storage area, with maxima of 907 µg/kg PCE, 147 µg/kg TCE, 3,500 µg/kg *cis*-1,2-DCE, 700 µg/kg *trans*-1,2-DCE, 90 µg/kg toluene, 35 µg/kg xylene, 60 µg/kg acetone, and 180 mg/kg TRPH.

- Based on results from 12 ground water monitoring events from February 1989 to December 1992, ground water samples from MW2, a nearfield downgradient well, consistently contained higher PCE concentrations (43-280 µg/l) than samples from upgradient well MW4 (36-210 µg/l), indicating ground water contamination from on-site sources. Concentrations of other VOC compounds detected in ground water samples from these two wells were similar.

- The sump and associated contaminated soil (TRPH and VOCs) were removed in November and December, 1991.

- According to the results of the most recent ground water monitoring events (3 samplings from September, 1993, to March, 1994), PCE concentrations in water samples from downgradient well MW2 were less than from upgradient MW4 (96-150 µg/l versus 120-210 µg/l). This suggests that the remedial action may have mitigated the continuing source(s) of ground water contamination in this area.

3. The investigation and remedial results for the transformer and clarifier area are summarized as follows:

   - Soil matrix data confirmed that soil in the transformer-clarifier area has been contaminated with petroleum hydrocarbon (maximum 21,000 mg/kg TPRH) with less amounts of VOCs (maximum 10 µg/kg PCE, 8,800 µg/kg toluene, and 1,100 µg/kg acetone).

   - Over 500 tons of contaminated soil were excavated and hauled from the site from November, 1991, to November, 1993, in the transformer-clarifier area.

   - Compared with ground water samples from the upgradient wells (MW1, MW2, and MW4), water samples from MW5, the nearfield downgradient well in this area, generally contained similar VOC concentrations. These data suggest that there have been no significant impacts to ground water from contaminated soils in this area.

4. The investigation results for the general storage area are summarized as follows:

   - One borehole was drilled and converted to a ground water monitoring well (MW3) in the general storage area. Soil matrix samples collected at 1', 5', 10', and 25' bgs contained maximum 15 mg/kg TPH at 1'-5' bgs, and non-detectable concentrations for VOCs.

   - From December, 1990, to December, 1992, (8 monitoring events), ground water samples from MW3 generally contained

higher concentrations of certain VOC compounds than samples from upgradient wells. Those compounds include TCE (49-96 µg/l versus <0.5-58 µg/l), 1,1-DCE (25-56 µg/l versus 5.4-23 µg/l), 1,1,1-TCA (2.4-8.7 µg/l versus <0.5-4.7 µg/l), 1,2-DCA (<0.5-1.2 µg/l versus <0.5 µg/l), and carbon tetrachloride (<0.5-1.5 µg/l versus <0.5-0.9 µg/l). Although VOCs decreased substantially in ground water from MW3 in September, 1993, and March, 1994, (similar to or less than concentrations observed at the upgradient wells), samples from MW3 contained the highest VOC concentrations in December, 1993. These data suggest the possible existence of unidentified, untested on-site VOC sources.

5. The following QA/QC deficiencies were noted for the soil matrix analyses in the report:

   - There are no calibration (initial and daily), laboratory quality control (LQC) check, and surrogate recovery data for all the chemical analyses.

   - There are no matrix spike/matrix spike duplicate (MS/MSD) data for EPA 418.1 analyses on October 29, and November 4 and 8, 1994.

   - The MS/MSD data of 1,1-DCE exceed acceptable limits for EPA 8240 analyses for all the analyses.

   The above deficiencies compromise the soil matrix data. Although correction of these deficiencies may not have changed the qualitative measurements, it would increase the degree of confidence in the accuracy of the analyses. The omitted QA/QC data should be resubmitted.

6. The second page of Table 2 was omitted from the report and should be resubmitted.

Based on the data presented in this report and previous submissions, and after visiting the site on December 1, 1994, Board staff concur that impacted soil has been adequately assessed and remediated in the drum storage-sump and transformer-clarifier areas. We therefore have no further requirements regarding subsurface investigation or remediation at the subject site. Assessment data confirm VOC soil contamination from ground surface to the water table in the former drum storage-sump area, and ground water data appear to confirm ground water contamination from releases in this area. Also, ground water monitoring data from MW3 suggest that ground water may have been impacted as a result of releases of liquid wastes from other unidentified, and untested, on-site sources.

The jurisdictional requirements of other agencies, such as the U.S. Environmental Protection Agency (USEPA), are not affected by the Board's "no further action" determination. Such agencies may choose to make their own determination concerning the site.

Please contact Rueen-Fang Wang at (213) 266-7533 if you have any questions, and address all correspondence to her attention.

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